30.   (Amended) The method of claim 28, wherein said morphogen comprises residues 330-431 of SEQ ID NO: 2.

31.   (Amended) The method of claim 28, wherein said morphogen comprises residues 48-292 of SEQ ID NO: 2.

32.   (Amended) The method of claim 28, wherein said morphogen comprises the amino acid sequence of SEQ ID NO: 2.

37.   (Amended) A method for reducing memory dysfunction associated with damaged hippocampal tissue, comprising contacting a hippocampal cell with a morphogen selected from an OP-1 polypeptide, a BMP-2 polypeptide, a BMP-5 polypeptide, a BMP-6 polypeptide, and a 60A polypeptide.

39.   (Amended) The method of claim 38, wherein said morphogen comprises residues 30-292 of SEQ ID NO: 2.

40.   (Amended) The method of claim 38, wherein said morphogen comprises residues 330-431 of SEQ ID NO: 2.

41.   (Amended) The method of claim 38, wherein said morphogen comprises residues 48-292 of SEQ ID NO: 2.

42.   (Amended) The method of claim 38, wherein said morphogen comprises the amino acid sequence of SEQ ID NO: 2.

Please add the following new claims:

46.   (New) The method of claim 28, wherein said morphogen comprises residues 292-330 of SEQ ID NO: 2.

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47.   (New) The method of claim 28, wherein said morphogen comprises residues 292-431 of SEQ ID NO: 2.

48.   (New) The method of claim 28, wherein said morphogen comprises residues 30-431 of SEQ ID NO: 2.

49.   (New) The method of claim 38, wherein said morphogen comprises residues 292-330 of SEQ ID NO: 2.

50.   (New) The method of claim 38, wherein said morphogen comprises residues 292-431 of SEQ ID NO: 2.

51.   (New) The method of claim 38, wherein said morphogen comprises residues 30-431 of SEQ ID NO: 2.

The claims presented above incorporate changes as indicated by the marked-up versions below.

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28.   (Amended) A method for ~~treating damaged hippocampal tissue~~ <u>enhancing the formation and development of dendrites and synapses in hippocampal cells</u>, comprising contacting said ~~tissue~~ <u>cells</u> with a morphogen selected from ~~the group consisting of~~ an OP-1 polypeptide, a BMP-2 polypeptide, a BMP-5 polypeptide, a BMP-6 polypeptide, and a 60A polypeptide ~~wherein said morphogen induces dendritic outgrowth of a hippocampal neuron~~.

29.   (Amended) The method of claim 28, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues 30-292 of SEQ ID NO: 2.

30.   (Amended) The method of claim 28, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues <u>330-431</u> ~~30-292~~ of SEQ ID NO: 2.

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31.   (Amended) The method of claim 28, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues 48-292 of SEQ ID NO: 2.

32.   (Amended) The method of claim 28, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises the amino acid sequence of SEQ ID NO: 2.

37.   (Amended) A method for ~~restoring a function of~~ <u>reducing memory dysfunction</u> <u>associated with</u> damaged hippocampal tissue, comprising contacting a hippocampal cell with a morphogen selected from ~~the group consisting of~~ an OP-1 polypeptide, a BMP-2 polypeptide, a BMP-5 polypeptide, a BMP-6 polypeptide, and a 60A polypeptide.

39.   (Amended) The method of claim 38, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues 30-292 of SEQ ID NO: 2.

40.   (Amended) The method of claim 38, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues <u>330-431</u> ~~30-292~~ of SEQ ID NO: 2.

41.   (Amended) The method of claim 38, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises residues 48-292 of SEQ ID NO: 2.

42.   (Amended) The method of claim 38, wherein said <u>morphogen</u> ~~OP-1 polypeptide~~ comprises the amino acid sequence of SEQ ID NO: 2.

REMARKS

Claims 28-51 constitute the pending claims in the present application. Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the prior Office Action.

1-2.   Applicants note that claims 28-45 are pending, and that a return to previously prosecuted subject matter will be considered prosecution of non-elected subject matter by the Examiner.

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